

SEQUENCE LISTING

SEQ ID NO. 1 (WGA1), SEQ ID NO. 2 (WGA2), or SEQ ID NO. 3 (WGA3).

WGA1 (A) cDNA sequence:

```

5   atgaag atgatgagca ccagggcctt cgcgctcggc
    61 gcggtgccc tctcgcctt cgcgcggcg accgctcagg ccagaggtg
    cggcgagcaa
    121 ggcagcaaca tggagtgcc caacaacctc tgctgcagcc agtacggcta
10  ctgcggggatg
    181 ggcggcgact actgcggcaa gggctgccag aacggcgcct gctggaccag
    caagcgtgc
    241 ggcagccagg cggcgggcgc gacgtgcacc aacaaccagt gctgcagcca
    gtacgggtac
15  301 tgcggcttcg gcgccagta ctgcggcgcc ggctgccagg gcggccctg
    cgcgcgcgac
    361 atcaagtgcg gcagccaggc cggcggaag ctgtgccga acaacctctg
    ctgcagccag
    421 tggggattct ggggcctcgg ttccgagttc tgcggcgcg gctgccagag
20  cgggtgcttc
    481 agcacccaca aaccgtgcgg caaggacgcc ggcggcagag tttgactaa
    caactactgt
    541 ttagcaagt ggggatactg tggcatcggc ccgggctatt gcggtgcagg
    ctgccagagt
25  601 ggcggctgcg atggtgtctt cgcgaggcc atcaccgcca actccactct
    tctccaagaa
    661 tga
  
```

WGA1 (A) protein sequence:

```

30  MKMMSTRALALGAAAVLAFAAATAQAQRCGEQGSNMECPNNLCC
    SQYGYCGMGDYCGKGCQNGACWTSKRCGSQAGGATCTNNQCCSQYGYCGFGAEYCGA
35  GCQGGPCRADIKCGSQAGGKLCNNLCCSQWGFGLGSEFCGGGCQSGACSTDKPCGK
    DAGGRVCTNNYCCSKWGSCGIGPGYCGAGCQSGGCDGVFAEAITANSTLLQE
  
```

WGA2 (D) cDNA sequence:

```

45  atgaga aagatgatga gcaccatggc cettacgtc ggcgcggctg tcttcctcgc
    cttcgccgcg gcgaccgcgc aggccagag gtgcggcgag cagggcagca
    acatggagtg
    ccccaacaac ctctgctgca gccagtacgg gtactgcggc atgggcggcg
    actactgcgg
    caagggctgc cagaacggcg cctgctggac cagcaagcgc tgcggcagcc
    aggccggcgg
50  ggcgactgtt cccaacaacc actgctgcag ccagtacggg cactgcggct
  
```

tcggagccga
 301 gtactgcggc gccggctgcc agggcggccc ctgccgcgcc gacatcaagt
 gcggcagcca
 361 gtccggcggc aagctatgcc cgaacaacct ctgctgcagc cagtggggat
 5 tctgcggcct
 421 aggttccgag ttctgcggcg gtggctgccg gagcgggtgt tgcagcaccg
 acaagccgtg
 481 cggcaaggac gccggcggca gggtttgac taacaactac tgtttagca
 agtggggatc
 10 541 ctgtggcatc ggcccgggct attgcgggtgc aggtgccag agcggcggct
 gtgacgtgt
 601 ctttgcggc gccatcaccg ccaactccac tcttctgca gaatga

WGA2 (D) protein sequence:

15 MRKMMSTMALTLGAAVFLAFAAATAQAQRCGEQGSNMECPNNLC
 CSQYGYCGMGDYGKGCQNGACWTSKRCGSQAGGATCPNNHCCSQYGHCGFGAEYCG
 20 AGCQGGPCRADIKGSQSGGKLCPPNNLCCSQWGFCLGSEFCGGGCQSGACSTDKPCG
 KDAGGRVCTNNYCCSKWGSCGIGPGYCGAGCQSGGCDVFAITANSTLLAE

WGA3 (B) cDNA sequence:

25 caaaggtgcg gcgagcaggg cagcggcatg gaggccccca acaacctgtg ctgcagccag
 61 tacggctact gcgggatggg cggcgattac tgcggcaagg gctgccagaa
 cggcgcggtg
 121 tggaccagca agcgggtgtg cagccaggcc ggcggcaaga cgtgccccaa
 30 caaccactgc
 181 tgcagccagt acgggcactg cggcttcggc ggcggagtact gcggcgccgg
 ctgccagggc
 241 ggcccctgcc gcgccgacat caagtgcggc agccaggccg gcggcaagct
 gtgccccaac
 35 301 aacctctgct gcagccagtg ggggtactgc ggcctcgggt ccgagttctg
 cggcgagggc
 361 tgccagaacg gcgcttgag caccgacaag ccgtgtggca aggacgccgg
 cggcagggtt
 421 tgcactaaca actactgctg tagcaagtgg ggatcctgtg gcatcgggtc
 40 cggctactgc
 481 ggtgcaggct gccagagcgg cggctgcgat ggtgtcttcg ccgaggccat
 cgccaccaac
 541 tccactcttc tcgcagaatga

WGA3 (B) protein sequence:

45 QRCGEQSGMECPNNLCCSQYGYCGMGDYGKGCQNGACWTSK
 RCGSQAGGKTCPPNNHCCSQYGHCGFGAEYCGAGCQGGPCRADIKGSQAGGKLCPPNNL
 50 CCSQWGYCGLGSEFCGEGCQNGACSTDKPCGKDAGGRVCTNNYCCSKWGSCGIGPGYC

GAGCQSGGCDGVFAEAIATNSTLLAE